Amendment to the Claims:

1. (Cancelled)

2. (Currently Amended) [[A]] The method as claimed in claim [[1]] 5, ~~wherein the measurement data are converted into~~ further including:

dynamically ~~updated~~ updating in real-time the histogram ~~readout objects~~ and the cumulative curve.

3. (Currently Amended) [[A]] The method as claimed in claim [[1]] 5, ~~wherein~~ further including:

filling the histogram ~~is filled~~ with measurement data from a time window advancing in real time with selectable fixed length.

4. (Previously Presented) A method as claimed in claim 2, wherein, during the conversion, the computer generates aids for the retrospective analysis of histograms in the form of selectable functions that can be displayed on a viewing screen and outputs them together with the converted data combined as picture

5 signals.

5. (Currently Amended) A method ~~as claimed in claim 1, wherein,~~ of automatically displaying medical measurement data in which a computer:

receives the medical measurement data,

automatically converts in real time the received measurement data into

5 data for histograms,

during the conversion, ~~the computer~~ generates a cumulative curve indication of the medical measurement data, and

outputs ~~it together with the converted data~~ the cumulative curve combined with the histograms as picture signals.

6. (Currently Amended) [[A]] The method as claimed in claim [[1]] 5, wherein the computer processes control signals that are produced by input means communicating with the computer and that serve to controls the conversion and/or the output of the picture signals.

7. (Currently Amended.) A device for automatically displaying medical measurement data, comprising a computer that is designed for receiving medical measurement data, automatic real-time conversion of the received measurement data into data for histograms and for outputting the converted data as picture signals programmed to perform the method as claimed in claim 5.

8. (Currently Amended) [[A]] The device as claimed in claim [[6]] 7, wherein the computer is designed to convert the measurement data further programmed to dynamically update[[d]] in real-time the histogram readout objects and the cumulative curve.

9. (Currently Amended) A device for automatically displaying medical measurement data, comprising a computer programmed to perform the method as claimed in claim 4 6 8, wherein the computer is designed to generate, during the conversion, aids for the retrospective analysis of histograms in the form of selectable functions that can be displayed on a viewing screen and to output them together with the converted data combined as picture signals.

10. (Currently Amended) A device for automatically displaying medical measurement data, comprising a computer programmed to perform the method as claimed in claim 21, 5, wherein the computer is designed to generate, during the conversion, a cumulative curve readout of the medical measurement data and to output it together with the converted data combined as picture signals.

11. (Cancelled).

12.   (Currently Amended)   A   medical   monitoring   device, comprising [[a]] the displaying device as claimed in claim [[5]] 7.

13.   (Cancelled).

14.   (Currently Amended)   The   medical   monitoring   device   as claimed in claim [[13]] 15, further comprising computer means for generating a ~~cumulative curve readout of the medical measurement data~~ retrospective analysis aids including at least one of:

5   an inop bin for displaying times of invalid or out of action measurement data;

        a deviation readout;

        a direction-change indicator;

        a histogram snapshot and trends aid; and

10   a combination of a plurality of histograms.

15.   (Currently Amended)   [[The]] A medical monitoring device ~~as claimed in claim 14, wherein the cumulative curve is displayed concurrently with the histogram data wherein~~ comprising:

        computer means for receiving medical measurement data;

5   computer   means   for   automatically   converting   the   medical measurement   data   into   histogram   data; ~~as the computer means is receiving the medical measurement data;~~ and

        displaying means for visually displaying the histogram data and the cumulative curve ~~is displayed~~ concurrently with the histogram data as the medical

10   measurement data is received.

16.   (Currently Amended)   The   medical   monitoring   device   as claimed in claim [[13]] 15 further comprising an alarm indicator that is triggered when a ~~selectable number measurements~~ measurement of histogram data ~~are~~ is measured above or below a ~~selectable threshold~~ lower or upper alarm limit level.

17.   (Currently Amended)   The medical monitoring device as claimed in claim 13, wherein the histogram data is binned into ~~selectably-sized~~ histogram bins, the histogram bin size being definable by the user.

18.   (Previously Presented)   The medical monitoring device as claimed in claim 13 further comprising display means for displaying real-time signal patterns of the medical measurement data.

19.   (Currently Amended)   The medical monitoring device as claimed in claim 18, wherein the real-time signal patterns and the histogram data are displayed next to one another on the display means.

20.   (New)   The method as claimed in claim 5 further including:

displaying the histogram with the cumulative curve superimposed, the histogram and the cumulative curve having common axes and a common scales.

21.   (New)   The method as claimed in claim 4, wherein the retrospective analysis aids include at least one of:

a cumulative curve cursor for determining a percentage of time that histogram values are below a current cumulative cursor position;

range-selection cursors for determining a percentage of time that histogram values are within limits defined by the range-selection cursors;

a variability/stability readout that provides information about variability of the measurement data; and

a deviation and direction-change readout that shows deviation from a mean histogram value and a direction of measurement data change.

22.   (New)   A computer readable medium storing a computer program for controlling a computer to perform the method as claimed in claim 5.

23.   (New)   A medical monitoring device comprising:

a display;

a computer programmed to receive medical measurement data, convert the medical measurement data to histograms, dynamically update the histograms in

5   real time, generate aids for the retrospective analysis of histograms, and control the display to display the histograms and the retrospective histogram analysis aids, the retrospective histogram analysis aids including at least one of:

a cumulative curve cursor for determining a percentage of time that histogram values are below a current cumulative cursor position;

10   range-selection cursors for determining a percentage of time that histogram values are within limits defined by the range-selection cursors;

a variability/stability readout that provides information about variability of the measurement data; and

a deviation and direction-change readout that shows deviation from a

15   mean histogram value and a direction of measurement data change.